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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/674,040      | 09/29/2003  | Durga Prasad Malladi | 030245              | 2580             |

23696 7590 04/18/2007  
QUALCOMM INCORPORATED  
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| EXAMINER |
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NGUYEN, KHAI MINH

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2617

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|----------------------------------------|-------------------|---------------|
| 3 MONTHS                               | 04/18/2007        | ELECTRONIC    |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/18/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com  
kaskanla@qualcomm.com  
nanm@qualcomm.com

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/674,040             |  | MALLADI ET AL.      |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Khai M. Nguyen         |  | 2617                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-12, 14-18, 20-30, 32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 3-9, 15, 18, 20-30 and 32-33 is/are allowed.
- 6) ☒ Claim(s) 10-12, 14, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination (RCE) under 37 CFR 1.114 was filed in this application on 2/27/2007 before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. The request, however, lacks the fee required by 37 CFR 1.17(e) and/or the submission required by 37 CFR 1.114. Accordingly, the RCE is improper and any time period running was not tolled by the filing of the improper request.

### ***Response to Arguments***

2. Applicant's arguments filed 2/27/2007 have been fully considered but they are not persuasive.

Regarding the Jung and TIA/EIA references, applicant states that Jung and TIA/EIA are no disclosure or suggestion that if the mobile station is directed to enter soft handoff, the frame size is set to a first size and wherein if the mobile station is directed to leave soft handoff, the frame size is set to a second size.

In contrast to applicant's assertions, the examiner directs the applicant to TIA/EIA (ANSI/TIA/EIA-95-B-1999). TIA/EIA (ANSI/TIA/EIA-95-B-1999) clearly disclose "if the mobile station is directed to enter soft handoff (fig.B-7), the frame size is set to a first size (page7-133, lines 24-32, the base station may revise handoff related parameters for a mobile station operating on the traffic channel by sending the in-traffic system parameters message) and wherein if the mobile station is directed to leave soft handoff (fig.B-7), the frame size is set to a second size (page7-133, lines 24-32, the base station

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may revise handoff related parameters for a mobile station operating on the traffic channel by sending the in-traffic system parameters message)".

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-12, 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jung (U.S.Pat-6049716) in view of TIA/EIA (ANSI/TIA/EIA-95-B-1999).

Regarding claim 10, Jung teaches a mobile station configured to operate in a wireless communication system (fig.1-3) comprising:

a processing subsystem (fig.1-3, col.2, line 42 to col.3, line 3); and

a transceiver subsystem (fig.1-3, col.3, line 42 to col.3, line 3);

wherein the processing subsystem is configured to set a transmission parameter for the transceiver subsystem in response to detecting that the mobile station is entering or leaving soft handoff (fig.1-3, col.2, line 3 to col.3, line 67).

Jung fails to specifically disclose the transmission parameter comprises frame size. However, TIA/EIA teaches the transmission parameter comprises a frame size (page 7-133, lines 24-32, the base station may revise handoff related parameters for a

mobile station operating on the traffic channel by sending the in-traffic system parameters message). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the transmission parameter comprises a frame size as taught by TIA/EIA with Jung teaching in order to reducing the number of soft handoff can lessen the system load and the possibility of handoff in the middle of the target cell it can get an effect of handoff efficiency and raise communication quality.

Regarding claim 11, Jung further teaches a mobile station as recited in claim 10, wherein the processing subsystem is configured to detect that the mobile station is entering or leaving soft handoff based upon a received handoff direction message (HDM) (fig.1-3, 6, col.2, line 3 to col.3, line 67).

Regarding claim 12, Jung further teaches a mobile station as recited in claim 11, wherein the processing subsystem is configured to set the transmission parameter to a first value if the HDM directs the mobile station to enter soft handoff (fig.1-3, 6, col.2, line 3 to col.3, line 67), and to set the transmission parameter to a second value if the HDM directs the mobile station to leave soft handoff (fig.1-4, 6, col.4, line 48 to col.5, line 12).

Regarding claim 14, Jung and TIA/EIA further teach a mobile station as recited in claim 12, wherein the first value is greater than the second value (see Jung, col.1, line 55 to col.2, line 19, see TIA/EIA, page 7-133, lines 24-32).

Regarding claim 16, Jung further teaches a mobile station as recited in claim 11, further comprising measuring a pilot signal strength for each of one or more base

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stations and periodically transmitting one or more pilot strength measurement messages to a network connected to the base stations (fig.1-3, 6, col.2, line 3 to col.3, line 67).

Regarding claim 17, Jung further teaches a mobile station as recited in claim 16, further comprising transmitting a handoff completion message to the network after receiving the HDM (fig.1-3, 6, col.1, lines 36-65, col.5, lines 35-67).

***Allowable Subject Matter***

4. Claims 1, 3-9, 15, 18, 20-30, 32 and 33 are allowed.

Applicant's independent claims 1, 18 and 27: The present in invention is directed to a wireless communication system, the independent claim identifies the patentably distinct feature "wherein the network is configured to direct the mobile station to enter or leave soft handoff status; and wherein the mobile station is configured to modify a set of transmission parameters in response to the network directing the mobile station to enter or leave soft handoff; the transmission parameter comprises a frame size, wherein if the mobile station is directed to enter soft handoff, the frame size is set to a first size and wherein if the mobile station is directed to leave soft handoff, the frame size is set to a second size". Applicant's independent claims 1, 18 and 27 comprise a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claims 4, 15, 21 and 33: The present in invention is directed to a wireless communication system, the independent claim identifies the patentably distinct feature "wherein the mobile station is configured to modify a set of transmission parameters in response to the network directing the mobile station to enter

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or leave soft handoff: wherein the transmission parameter comprises a frame size, wherein if the mobile station is directed to enter soft handoff, the frame size is set to a first size and wherein if the mobile station is directed to leave soft handoff, the frame size is set to a second size, wherein the first size is greater than the second size, and wherein the first size is 10 ms and the second size is 2 ms ". Applicant's independent claims 4, 15, 21 and 33 comprise a particular combination of elements, which is neither taught nor-suggested by prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

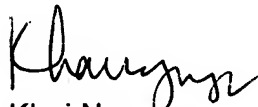
### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khai M. Nguyen whose telephone number is 571.272.7923. The examiner can normally be reached on 8:00-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph feild can be reached on 571.272.4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Khai Nguyen  
Au: 2617

4/9/2007

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER